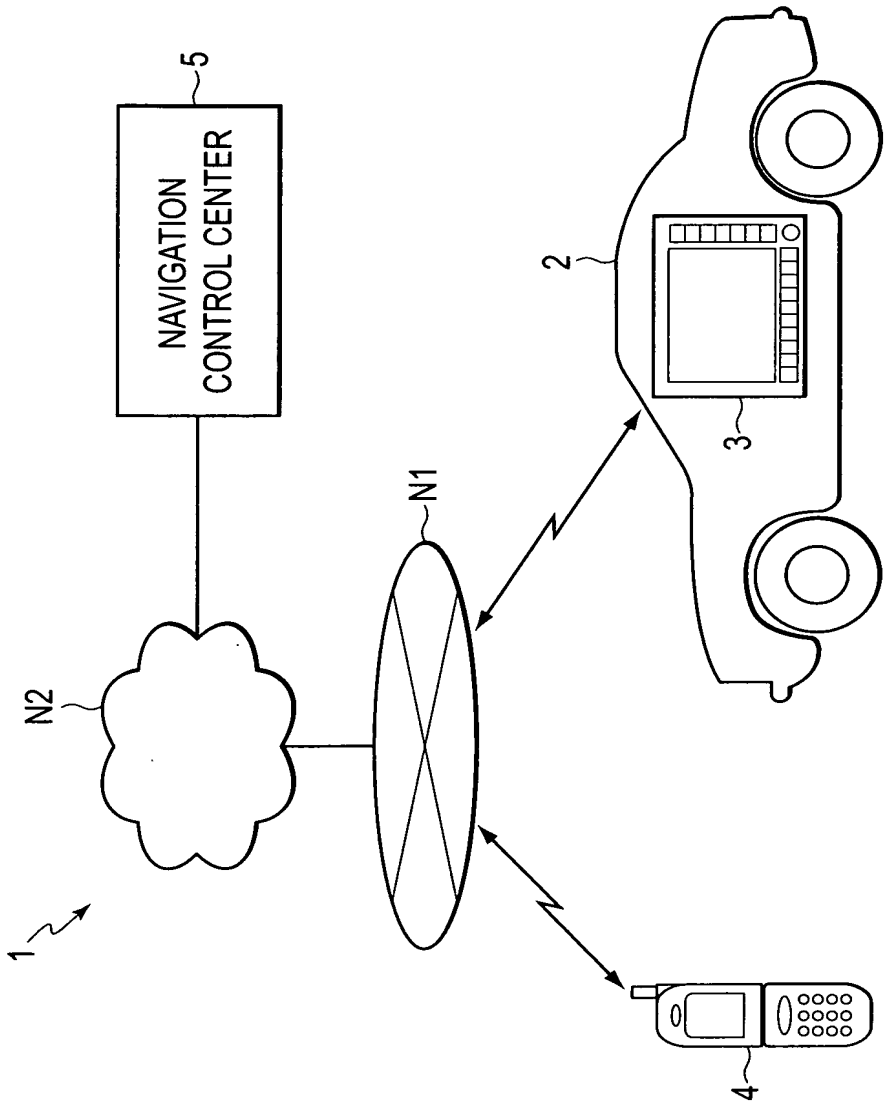
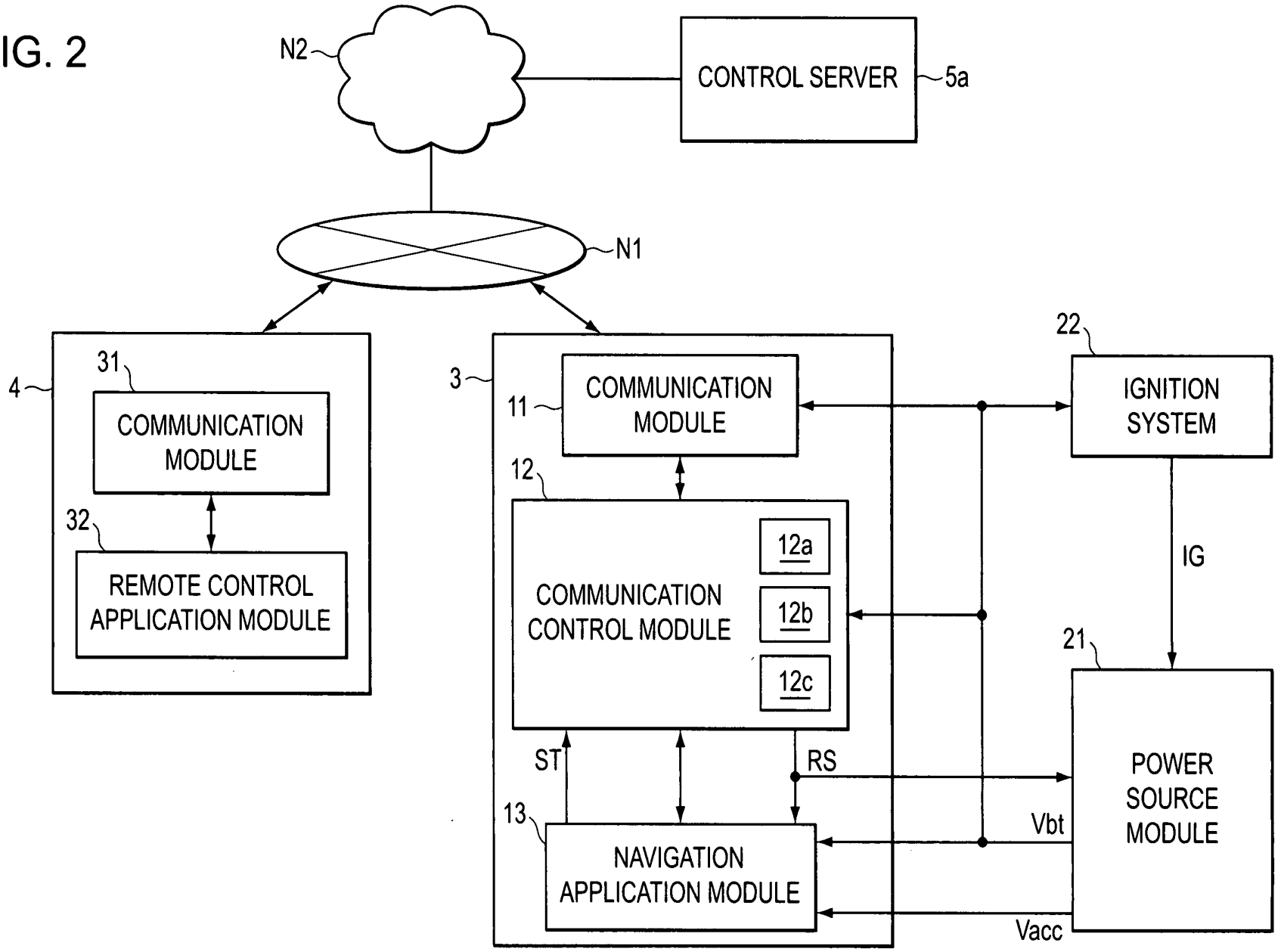


FIG. 1

FIG. 2


N2
CONTROL SERVER
5a
N1
4
31
COMMUNICATION MODULE
32
REMOTE CONTROL APPLICATION MODULE
3
11
COMMUNICATION MODULE
12
COMMUNICATION CONTROL MODULE
12a
12b
12c
ST
RS
13
NAVIGATION APPLICATION MODULE
22
IGNITION SYSTEM
IG
21
POWER SOURCE MODULE
Vbt
Vacc

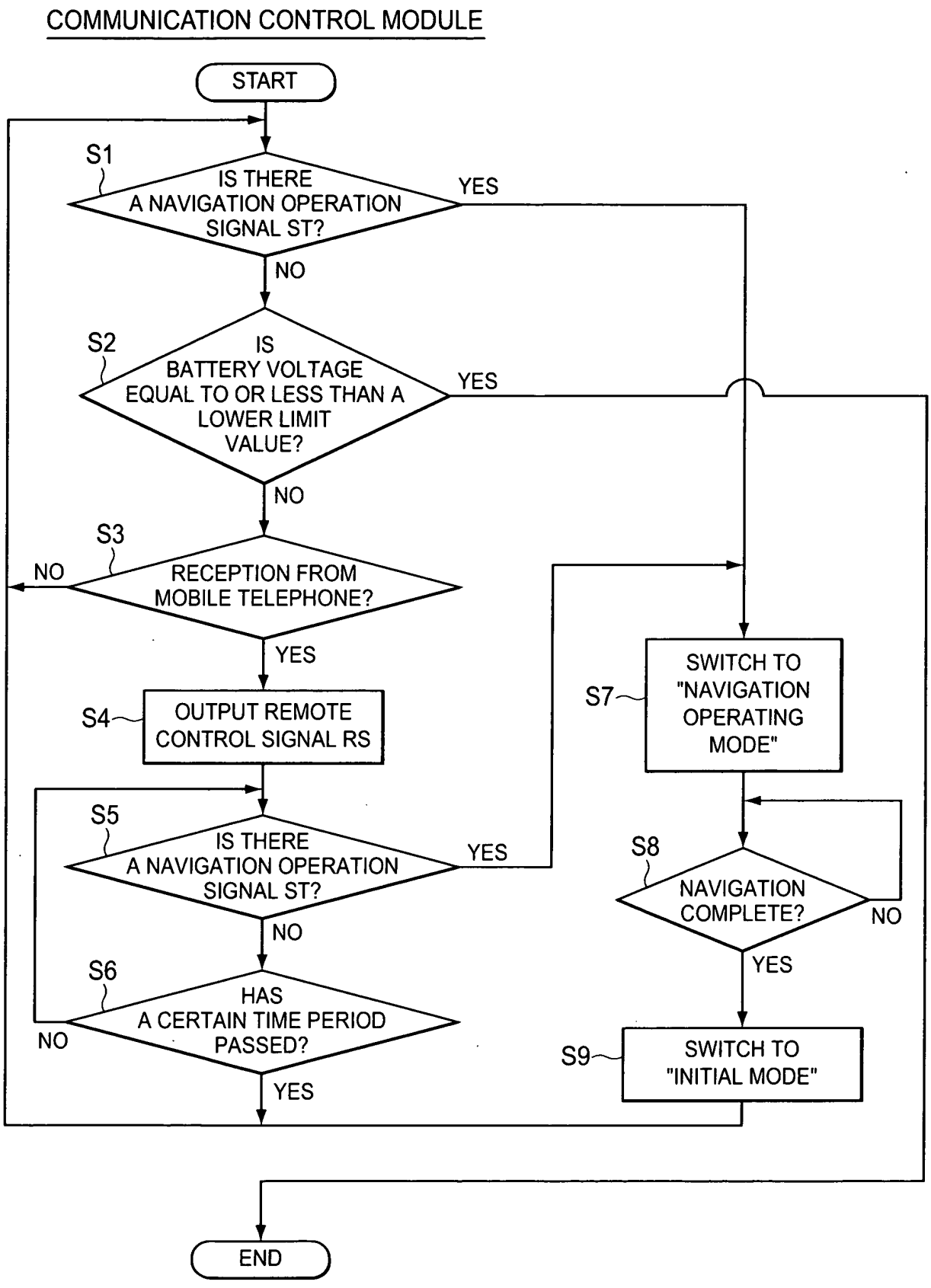
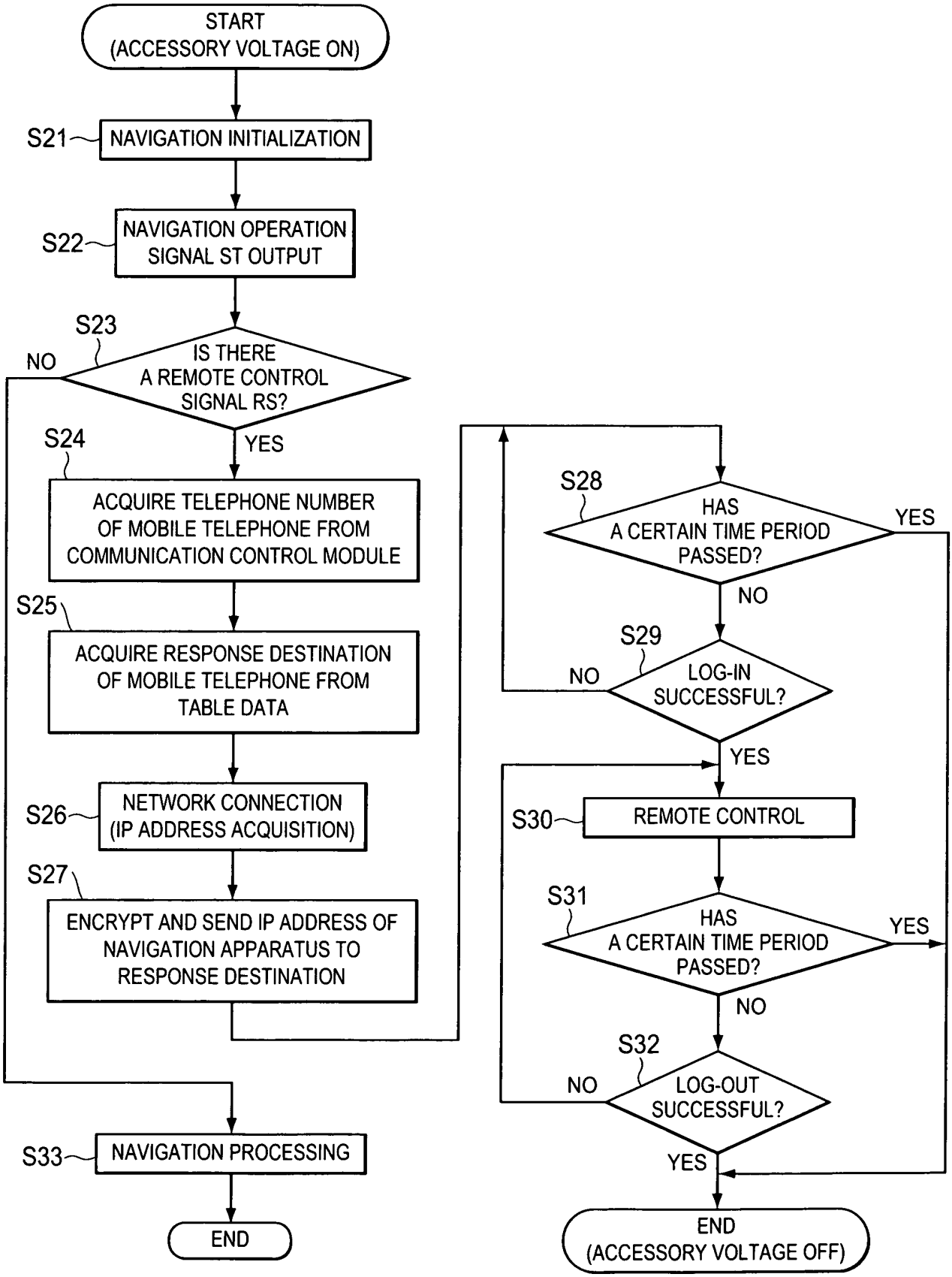

COMMUNICATION CONTROL MODULE
START
S1
IS THERE A NAVIGATION OPERATION SIGNAL ST?
YES
NO
S2
IS BATTERY VOLTAGE EQUAL TO OR LESS THAN A LOWER LIMIT VALUE?
YES
NO
S3
RECEPTION FROM MOBILE TELEPHONE?
NO
YES
S4
OUTPUT REMOTE CONTROL SIGNAL RS
S5
IS THERE A NAVIGATION OPERATION SIGNAL ST?
YES
NO
S6
HAS A CERTAIN TIME PERIOD PASSED?
NO
YES
S7
SWITCH TO "NAVIGATION OPERATING MODE"
S8
NAVIGATION COMPLETE?
NO
YES
S9
SWITCH TO "INITIAL MODE"
END

FIG. 3

NAVIGATION APPLICATION MODULE

FIG. 4



REMOTE CONTROL APPLICATION MODULE

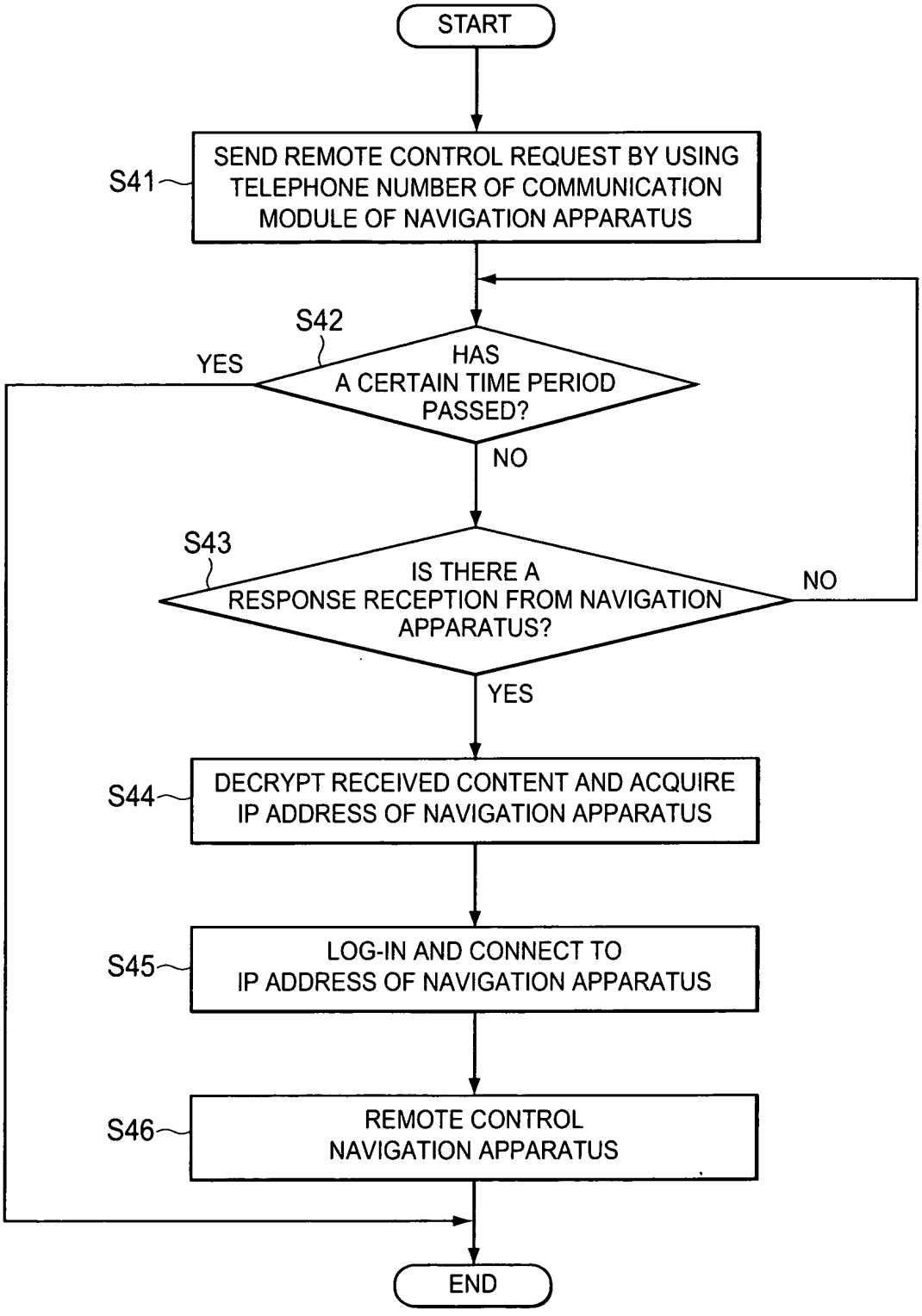
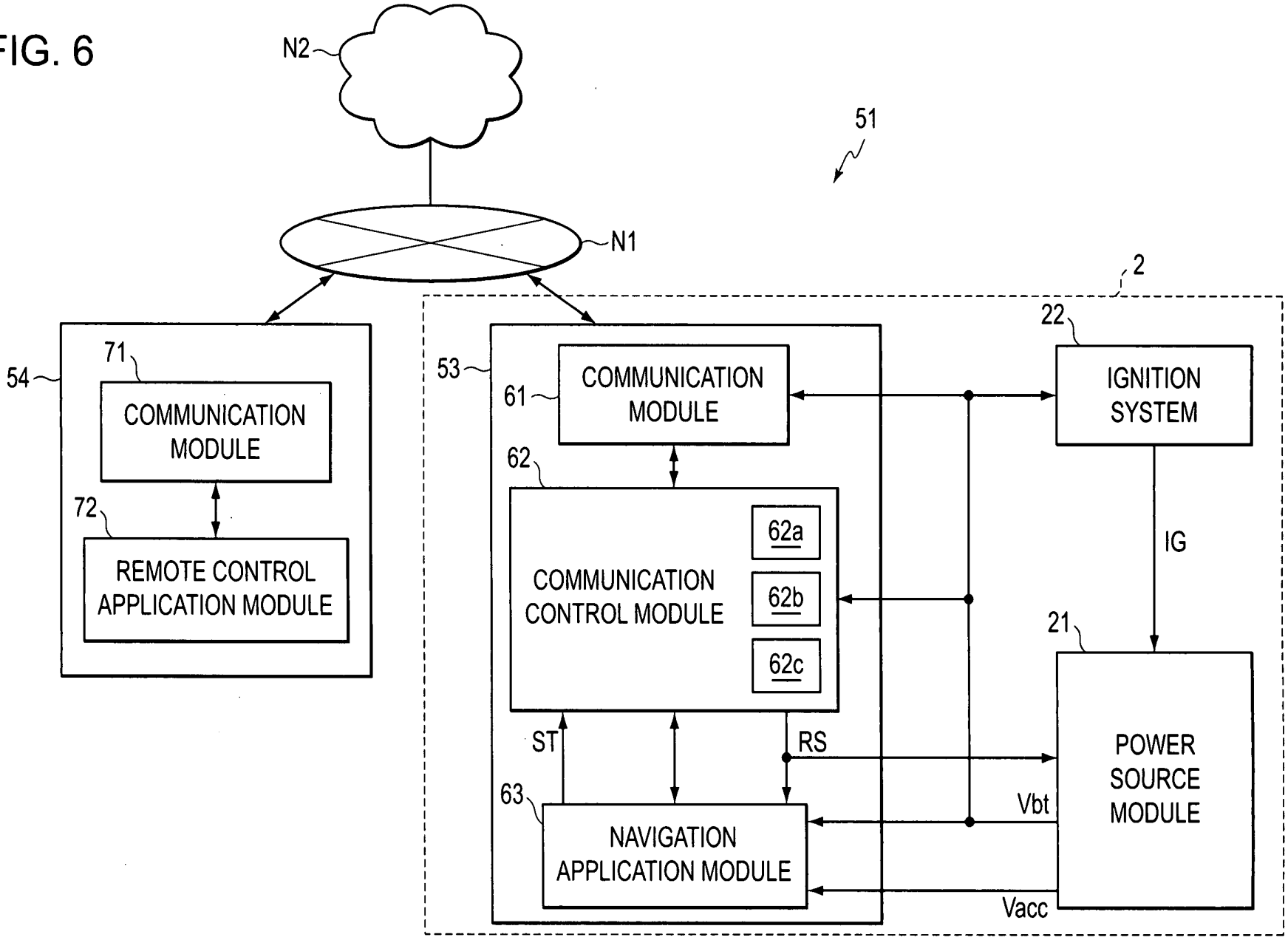


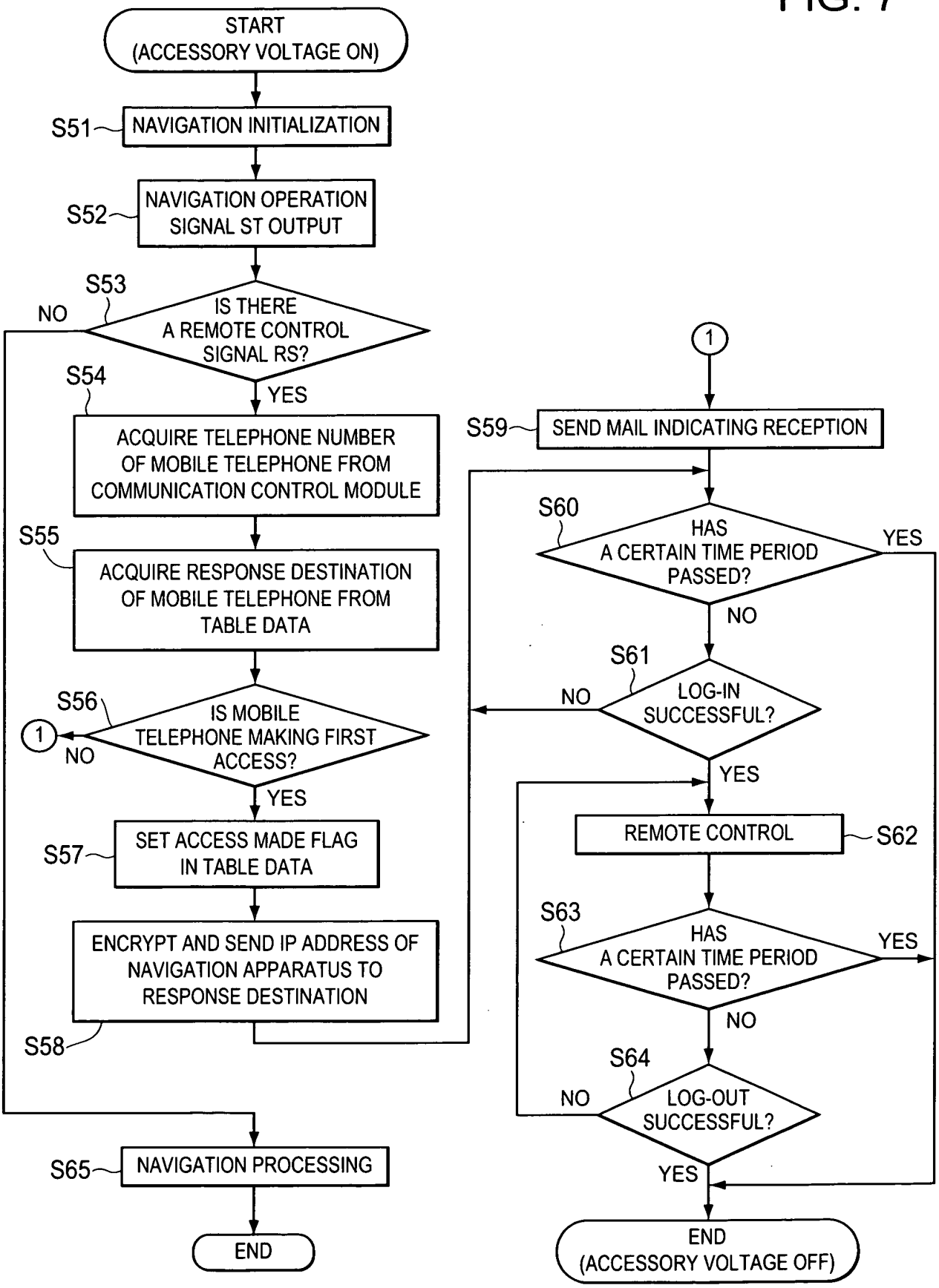
FIG. 5

FIG. 6


N2
51
N1
2
54
71
COMMUNICATION MODULE
72
REMOTE CONTROL APPLICATION MODULE
53
61
COMMUNICATION MODULE
62
COMMUNICATION CONTROL MODULE
62a
62b
62c
ST
RS
63
NAVIGATION APPLICATION MODULE
22
IGNITION SYSTEM
IG
21
POWER SOURCE MODULE
Vbt
Vacc

NAVIGATION APPLICATION MODULE

FIG. 7



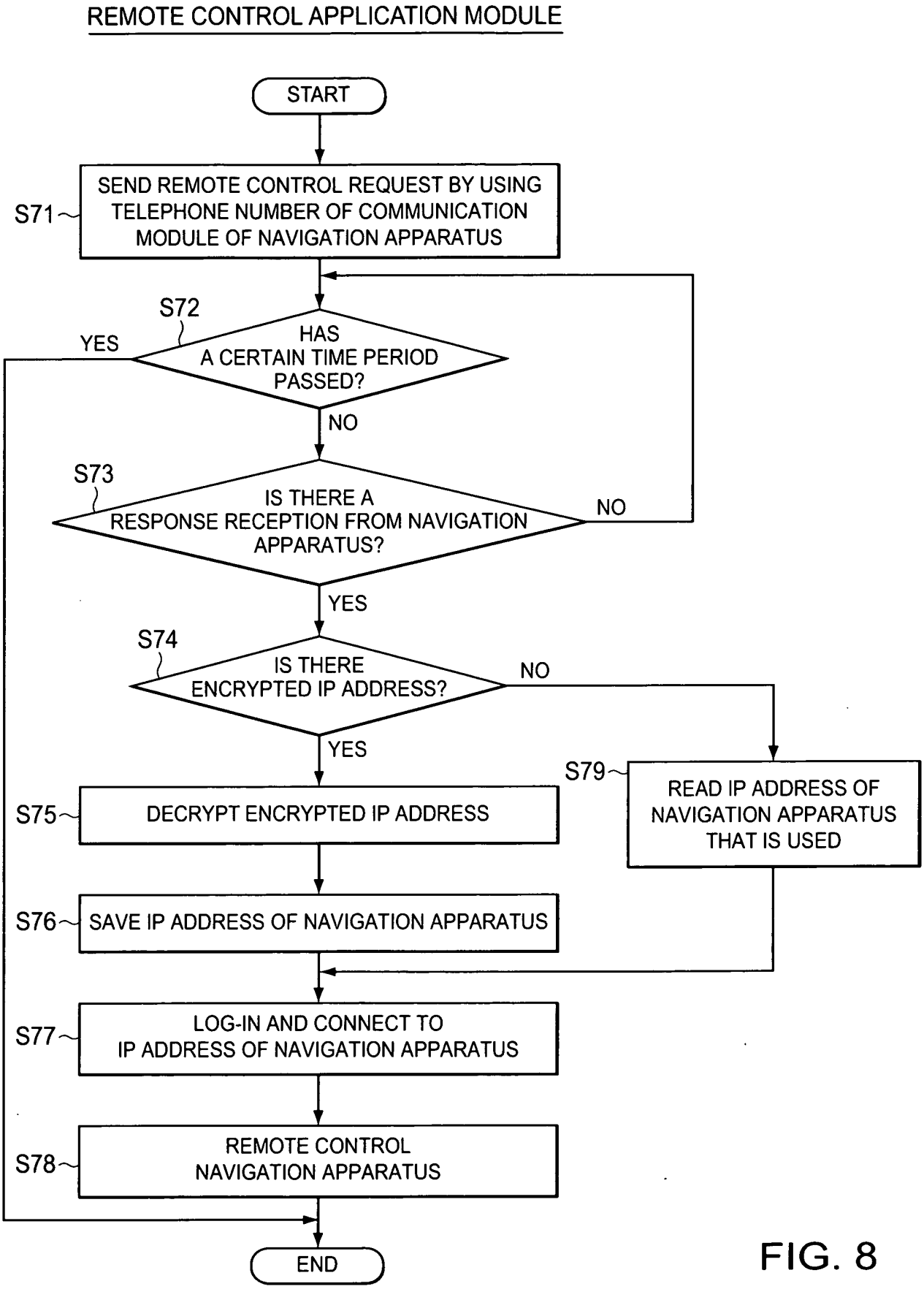

REMOTE CONTROL APPLICATION MODULE
START
SEND REMOTE CONTROL REQUEST BY USING TELEPHONE NUMBER OF COMMUNICATION MODULE OF NAVIGATION APPARATUS
S71
S72
HAS A CERTAIN TIME PERIOD PASSED?
YES
NO
S73
IS THERE A RESPONSE RECEPTION FROM NAVIGATION APPARATUS?
NO
YES
S74
IS THERE ENCRYPTED IP ADDRESS?
NO
YES
S79
READ IP ADDRESS OF NAVIGATION APPARATUS THAT IS USED
S75
DECRYPT ENCRYPTED IP ADDRESS
S76
SAVE IP ADDRESS OF NAVIGATION APPARATUS
S77
LOG-IN AND CONNECT TO IP ADDRESS OF NAVIGATION APPARATUS
S78
REMOTE CONTROL NAVIGATION APPARATUS
END

FIG. 8